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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/924,731	08/08/2001	Sharad Sundaresan	MSFT-0688/180597.1	3961
41505 7590 12/29/2006 WOODCOCK WASHBURN LLP (MICROSOFT CORPORATION) CIRA CENTRE, 12TH FLOOR 2929 ARCH STREET PHILADELPHIA, PA 19104-2891			EXAMINER BILGRAMI, ASGHAR H	
			ART UNIT 2143	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	DELIVERY MODE
3 MONTHS			12/29/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/924,731

Applicant(s)

SUNDARESAN ET AL.

Examiner

Asghar Bilgrami

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8-14 and 16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-14 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November-22-2006 has been entered.

Claim Rejections - 35 USC § 112

2. In light of the amended made to the independent claims the examiner has withdrawn 35 U.S.C. 112 second paragraph rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 1-6, 8-14 & 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bruck et al (U.S. 6,801,949 B1) and Brendel et al (U.S. 5,774,660).

5. As per claims 1 & 9 Bruck disclosed a method of connecting a client application at a computing device by way of a network access module (NAM) at the computing device to a software server 'server' instantiated on one of a plurality of hardware servers on a cluster 'cluster', the hardware server being remote from the computing device, the method comprising: the NAM at the computing device receiving 'cluster' and 'server' from the client application; the NAM at the computing device sending a first request message to 'cluster' requesting first connection information for connecting to 'server'; the NAM at the computing device receiving from 'cluster' a first reply message containing the requested first connection information (col.27, lines 23-67 & col.28, lines 1-24); the NAM at the computing device connecting the client application to 'server' as instantiated on a first hardware server on 'cluster' based on the received first connection information, wherein once connected, the client application and 'server' may transact business (col.1, lines 21-43). [Burck shows the use of server in "e-commerce" services]; The first hardware server on 'cluster' failing; 'cluster' in response to the failure of the hardware server automatically switching processing for 'server' from the failed first hardware server to an operating second hardware on the 'cluster' without notifying the NAM at the computing device that 'server' is longer at the failed first hardware server and the has been switched to the second hardware server, the connection of the client application and 'server' thereby being disrupted (col.8, lines 38-44); the NAM a the

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computing device itself discovering that the connection of the client application and 'server' has been disrupted (col.2, lines 23-30) {Although Bruck discloses a method of fail-over (fault tolerance) in which an alternative operational server is automatically selected when the current server fails, such that client does not encounter any disruptions. However Bruck in the background section of its disclosure mentions a scenario in which disruptions are encountered by the client upon an incident when a server fails (COL.2, lines 23-30), inclining that such a scenario was well known to the ordinary skill in the art}; the NAM at the computing device upon discovering the disrupted connection sending a second request message to 'cluster' requesting second connection information for connecting to 'server', the requested second connection information corresponding to the second hardware server; the NAM at the computing device receiving from 'cluster' a second reply message containing the requested second connection information; and the NAM at the computing device connecting the client application to 'server' as instantiated on the second hardware server on 'cluster' based on the received second connection information, wherein once again connected, the client application and 'server' at the second hardware server may again transact business (col.2, lines 38-65). However Bruck did not explicitly disclose in detail NAM at the computing device caching the received second connection information in a cache; the NAM at the computing device subsequently again receiving 'cluster' and 'server' from the client application; the NAM at the computing device retrieving the cached connection information from the cache; the NAM at the computing device connecting

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the client application to 'server' on 'cluster based on the retrieved cached connection information.

In the same field of endeavor Brendel et al disclosed NAM at the computing device caching the received second connection information in a cache (col4, lines 5-16); the NAM at the computing device subsequently again receiving 'cluster' and 'server' from the client application; the NAM at the computing device retrieving the cached connection information from the cache; the NAM at the computing device connecting the client application to 'server' on 'cluster based on the retrieved cached connection information (col.2, lines 41-52).

It would have been obvious to one in the ordinary skill in the art at the time the inventions was made to have incorporated connection information caching capability on the client device network acing module as disclosed by Brendel in the method of connecting a client application at a computing device by way of network access module to a server as disclosed by Bruck in order to make the client's connection process to the server fast and efficient resulting in robust and reliable network access service.

6. As per claims 2 & 10 Bruck-Brendel disclosed the method of claim 1 comprising sending each request message as a UDP (user datagram protocol) packet addressed to a UDP address of 'cluster' (Bruck col.14, lines 55-67 & col.15, lines 1-10).

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7. As per claims 3 & 11 Bruck-Brendel disclosed the method of claim 1 comprising receiving each requested connection information including an address of 'cluster' on which 'server' is listening (Bruck col.8, lines 1-33).

1. As per claims 4 & 12 Bruck-Brendel disclosed the method of claim 1 comprising receiving each requested connection information including an address of 'cluster' on which 'server' is listening for packets formatted according to a VIA (Virtual Interface Architecture) protocol (Bruck col.7, lines 10-37 & col.8, lines 1-33).

8. As per claims 5 & 13 Bruck-Brendel disclosed the method of claim 1 comprising receiving each requested connection information including each address of 'cluster' on which 'server' is listening and a corresponding protocol associated with the address by 'server' (Bruck col.7, lines 10-37 & col.8, lines 1-33).

9. As per claims 8 & 16 Bruck-Brendel disclosed the method of claim 1 further comprising: the NAM at the computing device determining whether the connected-to server is in fact 'server' and if not: the NAM at the computing device sending a new request message to 'cluster' requesting new connection information for connecting to 'server'; the NAM at the computing device receiving from 'cluster' a new reply message containing the requested new connection information; and the NAM at the computing device connecting the client application to 'server' on 'cluster' based on the received new connection information (Bruck col.2, lines 38-65).

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Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Asghar Bilgrami whose telephone number is 571-272-3907. The examiner can normally be reached on 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on 571-272-3924. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



AB


JEFFREY PWU
EXAMINER